

DRAFT

A meeting of the New Hampshire Water Well Board was held on March 16, 2009 at 10:30 AM, in rooms 111& 112, 29 Hazen Drive, Concord NH, 03302.

Present were: Jeffrey Tasker, Chairman

Board Members: Peter Caswell, Stephen Smith, and Thomas Garside

NHDES Staff: Richard Schofield and Allyson Gourley

Chairman Tasker brought the meeting to order at 10:30 AM.

Approval of Minutes

12/08/08 Meeting: Upon motion by Peter Caswell and seconded by Stephen Smith, the Board unanimously voted to accept the Minutes of the meeting.

Licensing

Notice to Septic System Installers

Mr. Schofield briefed the Board regarding a recent compliance matter. He had received information that point wells and dug wells continued to be installed by excavation contractors in the Conway, Tamworth and Ossipee region who were not licensed to construct wells. Mr. Schofield said that 280 notices were mailed to licensed septic system installers in this region of the state. The notices outlined the licensing requirements for well construction and pump installation. Mr. Schofield told the Board the program had received approximately 15 – 20 license application requests as a result of the mailing. He said that only one of the applications was complete at the time of the meeting, making him question whether the application process may have discouraged the others from filing.

Chairman Tasker commented on Mr. Schofield's remark that the application may be too complicated. He said that excavation contractors have approached him with concerns regarding the "reference" portion of the application. Most cannot satisfy the requirement for three references, only one of which can be a co-worker.

The Board asked Mr. Schofield if the notices had been sent registered mail. He said that they had been sent first class mail; to send that many letters registered mail would be too expensive. Chip Mackey, the program's licensing coordinator, was present at the meeting and explained that all mail sent by the State is "return requested" so that any mail that is undeliverable is returned to the sender.

New Applicants

Mr. Schofield presented (7) License Applications for the Board to review:

- Robert Hanson of Hanson Excavating Inc., North Conway NH, applied for a Dug Well Contractor License.
- Michael S. Magnin of Boart Longyear Co., Indianapolis, IN, applied for a Drilled Well, Wash Well and Technical Well Contractor License.
- Robert Marcoux of Miller Engineering & Testing Inc., Manchester NH, applied for a Technical Well Contractor License.
- Christopher Palmer of East Coast Explorations, Hallowell ME, applied for a Technical Well Contractor License.
- James Swalgen of American Generations Plumbing & Heating LLC., Hooksett NH, applied for a Pump Installers License.
- Anthony Quagliaroli of Dragin Geothermal Well Drilling Inc., Meredith NH, applied for a Pump Installer License.
- Brett Swiatek Sr. of Dragin Geothermal Well Drilling Inc., Meredith NH, applied for a Pump Installer License.

The Board discussed the applications submitted by Anthony Quagliaroli and Brett Swiatek of Dragin Geothermal Well Drilling. It was determined that the applications were incomplete because two out of three of the references in each case are co-workers. The applicants will be required to submit one additional reference. The Membership decided that if the applicants were unable to get an additional reference, the applications could be reconsidered if the applicants submit a waiver request.

Upon motion by Mr. Garside and seconded by Mr. Smith, the Board voted unanimously to allow the remaining applicants to sit for licensing exams.

Mr. Mackey shared a situation with the Membership related to the earlier discussion of application complexity. He said he had received an application from an excavation contractor as a result of the mailing sent by Mr. Schofield. He noted that the application was incomplete because only one reference had been submitted. Mr. Mackey called the applicant, informing him that if he faxed the necessary reference information before 10:30 that morning, the Board could consider his application at its meeting today. The applicant told Mr. Mackey that he could not satisfy the reference requirements and requested that he send his check back to him. Mr. Mackey suggested to the Board that the reference requirements for Dug Well applicants could be less stringent than that required of other license types.

Mr. Schofield agreed, saying that he feels the Membership and staff need to work with individuals that are willing and making an effort to become licensed.

The Board discussed the creation of a sub-committee to review the matter and consider revising the exam.

Mr. Schofield suggested that the Board should update the pump installer's exam and include a section pertaining to electrical requirements.

The Board decided that this issue should be discussed in greater detail at the next meeting.

Break: 11:14 am.

Meeting reconvened at 11:25 am.

Geothermal Technology

New Ground Exchange System – Kevin Maher, Thermonexus, LLC.

Kevin Maher of Thermonexus LLC gave a power-point presentation to the membership on the geothermal systems installed by his company. He told the Board that his product uses different technology from other products on the market. He stated the advantages of his system include fewer holes, better performance, reduced trenching, less drilling required and uses less space. He said his system uses a “proprietary grout” which greatly reduces the risk of cross-contamination. He added that his company would like to obtain approval for their grout to be used in New Hampshire. Mr. Maher said that the system involves a highly technical install because once the pipe joiner sets there is no ability to make readjustments.

Mr. Schofield requested Material Safety Data Sheets (“MSDS”) on the products used in the Thermonexus geothermal systems.

Standing Column Wells

Stephen Roy with the NHDES Drinking Water & Groundwater Bureau (“DWGB”) reported on a matter involving a Public Water System that has submitted an application to use a standing column well as both a drinking water source and as an open-loop geothermal heat exchange system. Mr. Roy stated that Sarah Pillsbury had hoped to discuss the issue with the Board but was unable to attend the meeting and he was representing Sarah at her request.

Mr. Roy stated that under the purview of the DWGB as the permitting entity for Public Drinking Water Supply Wells, the bureau does not support and will not allow Public Drinking Water wells to also be used for standing column geothermal heat exchange.

Mr. Roy explained the rationale for the bureau’s position at this time is based on a number of unknowns with these systems. The slow evolution of water quality over time, the effect of increased temperature over time related to impact on pH and dissolved oxygen content, and the possibility of containment failure of the refrigerant coil, however improbable. He also said that based on the research he has conducted, none of the refrigerant coils on the market today are NSF/ANSI 60 or NSF/ANSI 61 certified for potable water. Public water supplies typically serve a larger body of users than a private well, so if a problem does occur a larger number of people are impacted.

Mr. Schofield stated that he also discussed this issue with Sarah Pillsbury and he fully agreed with the position taken by the DWGB. However, he suggested that with regard to private well owners who want to use their drinking water well for geothermal heat exchange, the homeowner

is taking on the risk. Mr. Schofield said that Ms. Pillsbury wanted the Board to be aware of the bureau's concern with this issue and the Board could consider whether it should be concerned for private well owners. He suggested that a Fact Sheet or Notice could be provided by licensees to homeowners who are having these systems installed.

In closing, Mr. Roy stated that in the broader perspective, the Department certainly wants to support alternative energy sources. He said there just is not enough data available at this time with regard to geothermal systems to assure that public health is being protected.

Lunch Break 12:25 pm.

Reconvene 1:08 pm.

Petition to Waive – Thomas P. O'Toole

Mr. Schofield briefed the Board regarding this matter which had been discussed at the last meeting. Thomas P. O'Toole of 99 Waterlot Rd., Sunapee, NH hired Brett Dashner of Dashner Electric to replace an existing pump in his well. Upon completion of the installation Mr. Dashner raised the well casing above grade to be in compliance with We 603.03. Mr. Dashner told Mr. Schofield that he had not been paid for the work because the property owner, Mr. O'Toole, was unhappy that the well head had been raised. Mr. Dashner requested that Mr. Schofield inspect the well. Mr. Schofield conducted an inspection on September 25, 2008 and provided photographs of the well to the Membership.

Mr. Schofield informed the Board that since the last meeting, he sent a letter to the owner with a copy of his inspection report. In response, Mr. O'Toole has submitted a request for an exemption.

Following some discussion, a motion was made by Stephen Smith to grant an exemption. The motion was seconded by Mr. Caswell and unanimously approved.

Enforcement

Reporting

Mr. Schofield reported on Notice of Finding ("NOF") letters that were sent to nine contractors who have not filed well completion reports within the last two years. Seven of the contractors responded by sending their well reports or stating that they have not installed any wells within the last two years. Mr. Schofield said DES issued an LOD to one contractor who contacted him and requested well completion report forms and still failed to submit his well completion reports; that contractor has since filed the reports. One contractor did not respond to the NOF letter. The Board recommended that Mr. Schofield call the contractor to see if the issue can be resolved.

Rules

Compliance

Mr. Schofield informed the Board that 250 copies of the new rules had been printed. He said that copies can be purchased from the DES Public Information Center ("PIC") for \$10.

Mr. Schofield told the membership that he received a complaint from a contractor who claims his competitors are not installing wells in conformance with the new grouting requirements, and therefore he is losing business to them because their bids are lower. He concluded that there is no easy solution to this issue, it is a matter of education and outreach and when necessary, enforcement. The program has sent two notices outlining the new rules to the industry, in its Newsletter last July and again in January this year. Mr. Schofield was also invited to speak at the last NH Water Well Association meeting on the new rules for geothermal wells. He added that DES does not have the resources to go out looking for violators.

Mr. Schofield briefed the Board about concerns regarding the cost/benefit of grouting raised by Representative Groen at the meeting on February 26, 2009. Some of the members were not present at that meeting, which was not a formal meeting for lack of a quorum.

Mr. Schofield brought an issue to the attention of the Membership. He noted that the rules regarding the grouting of standing column geothermal wells require cement-bentonite grout, while the rules pertaining to public drinking water wells require cement grout, bentonite grout or a cement-bentonite grout mix. He pointed out that this is an inconsistency and needs to be addressed.

The Board engaged in considerable discussion regarding the rationale for the grouting requirements. The Membership agreed that the inconsistency in the rules should be corrected, but felt that more research was needed to determine the best grout mixture. It was decided that some experts on grouting materials should be invited to speak to the Board at its next meeting.

Mr. Schofield discussed another issue involving the cable tool drillers. He told the Membership that based upon the information being provided to him on the well completion reports, 40% of the cable tool drillers are not installing 10' of casing into bedrock as required by the rules. He said these contractors are drilling and driving 6" pipe and it is not possible to install 10' of 6" pipe into bedrock using this method. He told the Board that he intended to send a letter to the cable tool drillers to address this issue and provide acceptable options.

The Board engaged in a lengthy discussion regarding this matter. In conclusion, the Membership decided that the rule should not be changed and Mr. Schofield should proceed with the letter as planned.

Old Business

Webpage

Mr. Schofield reported to the Board regarding the Complaint Registry. He stated that the Water Well Board has received (159) complaints since 1984.

The Board selected options presented by Mr. Schofield with regard to the look and operation of the Complaint Registry on the web. Upon motion by Mr. Smith and seconded by Mr. Garside, the Board unanimously voted to retain the "Action/Comment" field.

Maintenance (Fact Sheets)

Mr. Schofield informed the Membership that all of the Drinking Water and Groundwater Bureau Fact Sheets are now available on the Water Well Board Webpage; a total of 149.

New Business

Senate Bill 48

Mr. Schofield updated the Board on this matter. He said the bill had passed in the Senate and would soon be going before the House.

Existing Wells and Pumps

Mr. Schofield informed the Board he had received a call from a licensee requesting whether or not he was required to upgrade existing pump installations when he performed maintenance, repair, or replacement work. He provided the Board with background information regarding the rules and laws pertaining to this matter, We 104.02 and RSA 482-B:15. The program has required licensees to upgrade wells and pumps to current code when they perform maintenance, repair, or replacement work pursuant to the requirements of RSA 482-B:15.

Mr. Schofield asked for the Board's interpretation of the applicable laws and rules. Following a discussion, the Board ruled that when work is performed on an existing well or pump, the installation must be brought up to code in accordance with RSA 482-B:15.

Radon System Vents

Mr. Caswell told the Membership that he has been informed that a laboratory in Waterford MA had processed numerous water quality samples where squirrels had become trapped in the vents of radon treatment systems. Mr. Schofield told the Membership that this issue had been discussed by the Board a couple of years ago, but the Board did not take any action at that time. He recommended that a letter be sent to the Plumbers' Board to bring this issue to their attention. The Board members agreed with Mr. Schofield's recommendation.

Commercial / Industrial Pump Installations

Mr. Schofield brought this matter to the Board's attention. He informed the Board of cases he had been involved with in cooperation with the State Electrical Inspector where pump installers had installed the electrical wiring for water systems in commercial applications. Several code violations had been identified and he suggested that licensed pump installers probably should not be performing the work without a licensed electrician's oversight. He urged the Membership to take action with regard to this issue.

Mr. Smith commented that for some reason the distinction between residential and commercial applications was based upon the size of the pump; typically any job involving a pump greater than 3-horsepower was considered commercial. He said there should be a better distinction between a domestic application vs. a commercial use.

Following some discussion, the Membership agreed that many pump installers are capable of handling complete commercial pump installations. It was decided that the matter needs to be enforced on a case-by-case basis.

Well Database

The Board discussed the issue of people requesting changes to their well completion reports, particularly address changes. Mr. Schofield informed the Membership that he and Mr. Wuncsh are scheduled to meet with Gretchen Hamel later this month to obtain advice on this matter. Some of the Board members thought updating the information was a good idea.

Pump Installers Seminar

Mr. Schofield announced that the New Hampshire Water Works Association (NHWWA) will be hosting a seminar for Pump Installers on May 21, 2009. He informed the Membership of several other upcoming events of interest.

Meeting adjourned at 3:25 pm.